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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,309	03/07/2001	Raymond Severt Barsness	ROC920010075US1	2651

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IBM Corporation
Intellectual Property Law, Dept. 917
3605 Highway 52 North
Rochester, MN 55901

EXAMINER

DUONG, THOMAS

ART UNIT PAPER NUMBER

2145

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,309

Applicant(s)

BARSNESS ET AL.

Examiner

Thomas Duong

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This office action is in response to the applicants Appeal Brief filed on April 3, 2006.
Claims 1-23 are presented for further consideration and examination.
2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
3. In view of the appeal brief filed on April 3, 2006, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

Response to Argument

4. Applicants' arguments, see pg.12–pg.14, filed on April 3, 2006, with respect to *claims 1-23* have been fully considered and are persuasive. The finality of previous rejection is withdrawn.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skinner et al. (US006721740B1) and in view of Chow et al. (US006029175A).

7. With regard to claims 1 and 10, Skinner discloses,

- *a subject*; (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31; col.14, lines 8-47; module 307, fig.3)

Skinner discloses, *“a method and apparatus of performing active update notification is described. Components of an application are able to specify interest in a data object or set of data objects by registering an interest with an update management component of the application. The interest object specifies the interested application component, as well as the identity of one or more data objects or an attribute value or range of values to associate with data objects”* (Skinner, col.2, lines 54-61). In addition, Skinner discloses, *“within the client and application tiers, data is maintained in the form of data objects. Application server 307 maintains a set of objects containing data for the clients it serves”* (Skinner, col.14, lines 21-23). Hence, Skinner teaches of specifying and registering an interest object (i.e., subject) with an update management component of the application, so that *“when modifications are made to data objects corresponding to the registered interested objects, the interested application component or components receive an update notification form the update management component”* (Skinner, col.2, lines 61-65).

- *an observer associated with the subject and adapted to generate configuration information, the configuration information comprising an attribute of the observer;* and (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9,

lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3)

Skinner discloses, *“a method and apparatus of performing active update notification is described. Components of an application [i.e., observers] are able to specify interest in a data object or set of data objects by registering an interest with an update management component of the application. The interest object specifies the interested application component, as well as the identity of one or more data objects or an attribute value or range of values to associate with data objects”* (Skinner, col.2, lines 54-61). In addition, Skinner discloses, *“within the client and application tiers, data is maintained in the form of data objects. Application server 307 maintains a set of objects containing data for the clients it serves”* (Skinner, col.14, lines 21-23). Hence, Skinner teaches of specifying and registering an interest object (i.e., subject) with an update management component of the application, so that *“when modifications are made to data objects corresponding to the registered interested objects, the interested application component or components receive an update notification form the update management component”* (Skinner, col.2, lines 61-65).

- *a transmission manager associated with the subject, the transmission manager adapted to receive the configuration information from the observer and to selectively communicate update information to the observer based on the configuration information.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3)

Skinner discloses, *"a method and apparatus of performing active update notification is described. Components of an application [i.e., observers] are able to specify interest in a data object or set of data objects by registering an interest with an update management component of the application. The interest object specifies the interested application component, as well as the identity of one or more data objects or an attribute value or range of values to associate with data objects"* (Skinner, col.2, lines 54-61). In addition, Skinner discloses, *"within the client and application tiers, data is maintained in the form of data objects. Application server 307 maintains a set of objects containing data for the clients it serves"* (Skinner, col.14, lines 21-23). Hence, Skinner teaches of specifying and registering an interest object (i.e., subject) with an update management component (i.e., transmission manager) of the application, so that *"when modifications are made to data objects corresponding to the registered interested objects, the interested application component or components receive an update notification form the update management component"* (Skinner, col.2, lines 61-65).

However, Skinner does not explicitly disclose,

- *an observer associated with the subject and adapted to generate configuration information, the configuration information comprising an attribute of the observer; and*
- *a transmission manager associated with the subject, the transmission manager adapted to receive the configuration information from the observer and to selectively communicate update information to the observer based on the configuration information.*

Chow teaches,

- *an observer associated with the subject and adapted to generate configuration information, the configuration information comprising an attribute of the observer; and (Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)*

Chow discloses, *"the Revision Manger accepts a user input indicating that the user has some interest in monitoring a particular document. We prefer to this input as a specification of an 'object of interest' and to the user making the specifications as 'the interested party'"* (Chow, col.5, lines 32-36). In addition, Chow discloses, *"in this specific embodiment, the interested party specifies a maximum frequency for receiving notification updates, which the Revision Manager uses to assure update notifications do not occur too often"* (Chow, col.5, lines 39-43). Hence, Chow teaches of accepting the interested party's input indicating how often the update notifications should be sent to the interested party by the update management component.

- *a transmission manager associated with the subject, the transmission manager adapted to receive the configuration information from the observer and to selectively communicate update information to the observer based on the configuration information. (Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)*

Chow discloses, *"the Revision Manger accepts a user input indicating that the user has some interest in monitoring a particular document. We prefer to this input as a specification of an 'object of interest' and to the user making the specifications as 'the interested party'"* (Chow, col.5, lines 32-36). In addition, Chow discloses, *"in this specific embodiment, the interested party specifies a*

maximum frequency for receiving notification updates, which the Revision Manager uses to assure update notifications do not occur too often" (Chow, col.5, lines 39-43). Hence, Chow teaches of accepting the interested party's input indicating how often the update notifications should be sent to the interested party by the update management component.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Chow with the teachings of Skinner to *"provides means for users to inform it of which documents are worthy of monitoring and techniques for alerting users when documents of interest have been updated"* (Chow, col.6, lines 51-54). In addition, according to Chow, by allowing the user to specify the *"maximum frequency for receiving notification updates, ... the Revision Manager uses [it] to assure update notifications do not occur too often"* (Chow, col.5, lines 40-43).

8. With regard to claims 2-3, Skinner and Chow disclose,

- *wherein the configuration information includes a desired type indication* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3)
- *wherein the transmission manager selectively discards the update information in response to the desired type indication.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3)

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9. With regard to claims 4-5, Skinner and Chow disclose,

- *wherein the attribute of the observer includes a communication speed indication.*
(Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
- *wherein the transmission manager accumulates the update information in response to the communication speed indication.* (Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

10. With regard to claims 6-8, Skinner and Chow disclose,

- *wherein the transmission manager is an aspect associated with the subject.*
(Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
- *wherein the transmission manager selectively discards the update information in response to the desired type indication.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
- *wherein the transmission manager selectively modifies the update information in response to the configuration information.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

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11. With regard to claim 9, Skinner and Chow disclose,

- *further comprising:*
 - *a first processor;* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
 - *a first memory coupled to the first processor, wherein the subject and the transmission manager reside within the first memory;* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
 - *a second processor; and* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
 - *a second memory coupled to the second processor, wherein the observer resides within the second memory.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

12. With regard to claims 11-12, Skinner and Chow disclose,

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- *wherein the subject comprises a network management software program, and wherein the observer code segment comprises a graphical user interface.*

(Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

- *wherein the subject, the observer, and the aspect comprise objects.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

13. With regard to claims 13, 19 and 23, Skinner discloses,

- *communicating configuration information from the observer to an aspect, the configuration information comprising an attribute of the observer;* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3)

Skinner discloses, *“a method and apparatus of performing active update notification is described. Components of an application [i.e., observers] are able to specify interest in a data object or set of data objects [i.e., aspects] by registering an interest with an update management component of the application. The interest object specifies the interested application component, as well as the identity of one or more data objects or an attribute value or range of values to*

associate with data objects" (Skinner, col.2, lines 54-61). In addition, Skinner discloses, *"within the client and application tiers, data is maintained in the form of data objects. Application server 307 maintains a set of objects containing data for the clients it serves"* (Skinner, col.14, lines 21-23). Hence, Skinner teaches of specifying and registering an interest object (i.e., subject) with an update management component (i.e., transmission manager) of the application, so that *"when modifications are made to data objects corresponding to the registered interested objects, the interested application component or components receive an update notification form the update management component"* (Skinner, col.2, lines 61-65).

- *notifying the aspect of an update;* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3)

Skinner discloses, *"a method and apparatus of performing active update notification is described. Components of an application [i.e., observers] are able to specify interest in a data object or set of data objects by registering an interest with an update management component of the application. The interest object specifies the interested application component, as well as the identity of one or more data objects or an attribute value or range of values to associate with data objects"* (Skinner, col.2, lines 54-61). In addition, Skinner discloses, *"within the client and application tiers, data is maintained in the form of data objects.*

Application server 307 maintains a set of objects containing data for the clients it serves" (Skinner, col.14, lines 21-23). Hence, Skinner teaches of specifying and registering an interest object (i.e., subject) with an update management

component (i.e., transmission manager) of the application, so that *“when modifications are made to data objects corresponding to the registered interested objects, the interested application component or components receive an update notification from the update management component”* (Skinner, col.2, lines 61-65). Skinner teaches of a step where, upon receiving an update notification, the interest registry is searched for interested clients and then update notifications are sent to those clients that are interested in the change.

- *interrogating the update to generate to generate update information; and selectively communicating the update to the observer based on a comparison between the update information and the configuration information.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3)

Skinner discloses, *“a method and apparatus of performing active update notification is described. Components of an application [i.e., observers] are able to specify interest in a data object or set of data objects by registering an interest with an update management component of the application. The interest object specifies the interested application component, as well as the identity of one or more data objects or an attribute value or range of values to associate with data objects”* (Skinner, col.2, lines 54-61). In addition, Skinner discloses, *“within the client and application tiers, data is maintained in the form of data objects.*

Application server 307 maintains a set of objects containing data for the clients it serves” (Skinner, col.14, lines 21-23). Hence, Skinner teaches of specifying and registering an interest object (i.e., subject) with an update management

component (i.e., transmission manager) of the application, so that *“when modifications are made to data objects corresponding to the registered interested objects, the interested application component or components receive an update notification from the update management component”* (Skinner, col.2, lines 61-65). Skinner teaches of a step where, upon receiving an update notification, the interest registry is searched for interested clients and then update notifications are sent to those clients that are interested in the change.

However, Skinner does not explicitly disclose,

- *communicating configuration information from the observer to an aspect, the configuration information comprising an attribute of the observer*;

Chow teaches,

- *communicating configuration information from the observer to an aspect, the configuration information comprising an attribute of the observer*; (Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

Chow discloses, *“the Revision Manger accepts a user input indicating that the user has some interest in monitoring a particular document. We prefer to this input as a specification of an ‘object of interest’ and to the user making the specifications as ‘the interested party’”* (Chow, col.5, lines 32-36). In addition, Chow discloses, *“in this specific embodiment, the interested party specifies a maximum frequency for receiving notification updates, which the Revision Manager uses to assure update notifications do not occur too often”* (Chow, col.5, lines 39-43). Hence, Chow teaches of accepting the interested party’s input indicating how often the update notifications should be sent to the interested party by the update management component.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Chow with the teachings of Skinner to *“provides means for users to inform it of which documents are worthy of monitoring and techniques for alerting users when documents of interest have been updated”* (Chow, col.6, lines 51-54). In addition, according to Chow, by allowing the user to specify the *“maximum frequency for receiving notification updates, ... the Revision Manager uses [it] to assure update notifications do not occur too often”* (Chow, col.5, lines 40-43).

14. With regard to claims 14-18 and 20-22, Skinner and Chow disclose,

- *further comprising selectively modifying the update based on a comparison between the update information and the configuration information.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
- *further comprising accumulating the update information based on a comparison between the update information and the configuration information.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)
- *further comprising sending updated configuration information from the observer to the aspect, wherein the updated configuration information comprises an*

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updated attribute of the observer. (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

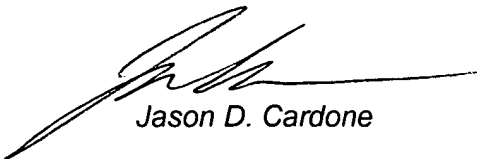
- *wherein the updated attribute of the observer includes a system load indication.* (Skinner, col.2, line 54 – col.3, line 23; col.8, lines 23-31, lines 59-67; col.9, lines 30-67; col.14, lines 8 – col.15, line 27; col.15, lines 40-48; col.16, lines 5-20; module 300A, fig.3; Chow, col.3, line 60 – col.6, line 67; col.12, lines 14-24; col.37, lines 9-26)

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Duong whose telephone number is 571/272-3911. The examiner can normally be reached on M-F 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason D. Cardone can be reached on 571/272-3933. The fax phone numbers for the organization where this application or proceeding is assigned are 571/273-8300 for regular communications and 571/273-8300 for After Final communications.

Thomas Duong (AU2145)

July 9, 2006



Jason D. Cardone

Supervisory PE (AU2145)